

U.S.S.N. 10/811,621

RECEIVED
CENTRAL FAX CENTER

APR 09 2008

Listing of Claims

1. (previously presented) An electrolyte bath, comprising:
an electrolyte solution suitable for metal electroplating;
and

a composition comprising an organic acid and a non-ionic polymer mixed with said organic acid, said non-ionic polymer selected from the group consisting of an alkoxyated alcohol, an alkoxyated amine, and an alkylphenol alkoxyate;

wherein said composition is disposed as a suspended layer within said electrolyte solution, said suspended layer adapted to form a wetting layer on a substrate as said substrate is passed through said suspended layer, said electrolyte bath adapted to form said wetting layer on said substrate prior to an electroplating process in said electrolyte solution.

2. (previously presented) The electrolyte bath of claim 1 wherein said organic acid is selected from the group consisting of citric acid and acetic acid.

3. (canceled)

4. (previously presented) The electrolyte bath of claim 1 wherein said composition is present in said electrolyte solution in a concentration of about 5 % by weight.

U.S.S.N. 10/811,621

5. (previously presented) The electrolyte bath of claim 1 wherein said non-ionic polymer has a molecular weight of less than 1,000.

6. (previously presented) The electrolyte bath of claim 5 wherein said organic acid is selected from the group consisting of citric acid and acetic acid.

7. (previously presented) The electrolyte bath of claim 1 wherein said organic acid is present in said composition in a wt.% of about 10, and wherein said non-ionic polymer is present in said composition in a wt.% of about 5.

8. (canceled)

9. (previously presented) An electrolyte bath, comprising:
an electrolyte solution suitable for copper electroplating;
and

a composition comprising an organic acid and a non-ionic polymer having a molecular weight of less than 1,000 mixed with said organic acid, said non-ionic polymer selected from the group consisting of an alkoxyated alcohol, alkoxyated amine, and an alkylphenol alkoxyate, said organic acid selected from the group consisting of citric acid and acetic acid;

U.S.S.N. 10/811,621

wherein said composition is disposed as a suspended layer within said electrolyte solution, said suspended layer adapted to form a wetting layer on a substrate as said substrate is passed through said suspended layer, said electrolyte bath adapted to form said wetting layer on said substrate prior to an electroplating process in said electrolyte solution.

Claims 10-11 (canceled)

12. (previously presented) The electrolyte bath of claim 9 wherein said composition is present in said electrolyte solution in a concentration of about 5% by weight.

13. (previously presented) The electrolyte bath of claim 9 wherein said organic acid is present in said composition in a wt.% of about 10, and wherein said non-ionic polymer is present in said composition in a wt.% of about 5.

Claims 14-16 (canceled)

17. (withdrawn) A method for electroplating a metal onto a surface in an electroplating electrolyte solution, comprising the steps of:

U.S.S.N. 10/811,621

providing a composition mixture comprising an organic acid and a non-ionic polymer;

forming a suspended layer of said composition mixture within said electrolyte solution;

forming a wetting layer on said surface by passing said surface through said suspended layer and into said electrolyte solution; and

electroplating said metal onto said surface following forming said wetting layer.

18. (withdrawn) The method of claim 17 wherein said organic acid is selected from the group consisting of citric acid and acetic acid and said non-ionic polymer is selected from the group consisting of an alkoxyated alcohol, an alkoxyated amine, and an alkylphenol alkoxyate.

19. (withdrawn) The method of claim 18 wherein said organic acid is present in said composition in a wt.% of about 10, and wherein said non-ionic polymer is present in said composition in a wt.% of about 5.

20. (withdrawn) The method of claim 17 further comprising a substrate and wherein said surface comprises a metal seed layer deposited on said substrate.

U.S.S.N. 10/811,621

21. (previously presented) The electrolyte bath of claim 1, wherein said non-ionic polymer is present in said composition in a quantity of from about 0.5 to about 10 wt. %.

22. (previously presented) The electrolyte bath of claim 1, wherein said organic acid is present in said composition in a quantity of from about 2 to about 20 wt. %.

23. (previously presented) The electrolyte bath of claim 9, wherein said non-ionic polymer is present in said composition in a quantity of from about 0.5 to about 10 wt. %.

24. (previously presented) The electrolyte bath of claim 9, wherein said organic acid is present in said composition in a quantity of from about 2 to about 20 wt. %.

25. (withdrawn) The method of claim 17, wherein said non-ionic polymer is present in said composition mixture in a quantity of from about 0.5 to about 10 wt. %.

U.S.S.N. 10/811,621

26. (withdrawn) The method of claim 17, wherein said organic acid is present in said composition mixture in a quantity of from about 2 to about 20 wt. %.